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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,108	09/19/2006	Byoung Woo Kim	2017-118	4219
53706 IPLA P.A. 3580 WILSHIRE BLVD. 17TH FLOOR LOS ANGELES, CA 90010	7590 03/05/2008		<div>EXAMINER</div> <div>WALDBAUM, SAMUEL A</div>	
			<div>ART UNIT</div> <div>1792</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE</div> <div>03/05/2008</div>	<div>DELIVERY MODE</div> <div>PAPER</div>

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/599,108

**Applicant(s)**

KIM, BYOUNG WOO

**Examiner**

SAMUEL A. WALDBAUM

**Art Unit**

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 September 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 and 2 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 19 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date 9/19/06  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

*Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over machine translation of Min Heo (KR 10-2002-0085360, since when translation is printed, the end of the text is cut off, so the pdf machine translation of actual application, KR 10-2001-0024834 is used since it shows all the text, which is the same as the publication, hereafter Heo) in view of Schneider et al (U.S. 5,807,037, hereafter `037) and Kressmann (U.S. pgpub. 2004/0149729, hereafter `729).*

3. Claim 1: Heo teaches a drain body (fig. 6) a cap (fig. 6, parts 52, 51, 55, 54) a core embedded in the cap wrapped in a coil (fig. 5, parts 62 and 63, page 3) with a ultrasonic vibrator (fig. 5, part 70, page 3) a controller (fig. 3, page 2 and 3) which provides power directly to the ultrasonic vibrator by the use of cables (page 3). It would have been obvious to one having

ordinary skill in the art at the time the invention was made to make a direct power source to a indirect power source, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961).

`037 is solving the same problem of providing power indirectly to an apparatus. `037 teaches the use of a embedded coil that is supplied power which transfers that power to the apparatus by induction (col. 5, lines 30-45). `729 is solving the same problem as the applicant providing power by induction by the means of a detachable member from the apparatus. `729 teaches that the detachable member is directly connected to the power source which then transfers the power to the apparatus by induction ([0062]). All of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention, meaning that the power can be transferred by induction by using a embedded coil in a detachable element as taught by `037 and `729 in Heo to yield the predictable result of providing power to the ultrasonic elements by the means of induction.

*Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over machine translation of Min Heo (KR 10-2002-0085360, since when translation is printed, the end of the text is cut off, so the pdf machine translation of actual application, KR 10-2001-0024834 is used since it shows all the text, which is the same as the publication) in view of Schneider et al (U.S. 5,807,037) and Kressmann (U.S. pgpub. 2004/0149729) as applied to claim 1 above, further in view of Segal (U.S. pgpub. 2002/0019709, hereafter `709) .*

4. Claim 2: Heo teaches that the controller is directly connected to the apparatus (pages 2 and 3, fig. 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have use a indirect method of communication instead of using cable communication, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961). Furthermore, '709 is solving the same problem as the applicant of using a indirect communication means between the controller and apparatus. '709 teaches the use of radio frequency (RF) transmitters and receiver on the controller and the apparatus as means for the controller to control the apparatus without having a direct physical connection to the apparatus ([0055] and [0056]). All of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention, meaning that the RF communication means taught by '709 can be used as the communication means between the controller and ultrasonic device in apparatus taught by Heo to yield a the predictable result allowing the controller to communicate with apparatus while not being physically connected to it. Heo teaches that the controller is mounted on the wall (fig. 1).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMUEL A. WALDBAUM whose telephone number is (571)270-1860. The examiner can normally be reached on M-TR 6:20-3:50, F 6:30-10:30 est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. A. W./  
Examiner, Art Unit 1792

/FRANKIE L. STINSON/  
Primary Examiner, Art Unit 1792